

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** ( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

U.S.PATENTS						<a href="#">Remove</a>
Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6884438		2005-04-26	Quintanar et al.	
	2	6074986		2000-06-13	Mulqueen et al.	
	3	4348385		1982-09-07	Synek	
	4	4610868		1986-09-09	Fountain et al.	
	5	4826689		1989-05-02	Violanto et al.	
	6	4997454		1991-03-05	Violanto et al.	
	7	5118528		1992-06-02	Fessi et al.	
	8	5145648		1992-09-08	Miyahara et al.	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		10561033
Filing Date		2005-12-16
First Named Inventor	Leifeng Cheng	
Art Unit		1624
Examiner Name	Zachary C. Tucker	
Attorney Docket Number		133087.09601 101119-1P US

9	5145684		1992-09-08	Liversidge et al.	
10	5468604		1995-11-21	Zengerle et al.	
11	5665331		1997-09-09	Bagchi et al.	
12	5780062		1998-07-14	Frank et al.	
13	5858410		1999-01-12	Muller et al.	
14	5843465		1998-12-01	Lundquist	
15	5932245		1999-08-03	Wunderlich et al.	
16	6048550		2000-04-11	Chan et al.	
17	5314506		1994-05-24	Midler, Jr. et al.	
18	5624941		1997-04-29	Barth et al.	
19	6383471		2002-05-07	Chen et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.W./

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

20	6432984		2002-08-13	Barth et al.	
21	6645985		2003-11-11	Barth et al.	
22	6375986		2002-04-23	Ryde et al.	
23	6127520		2000-10-03	Ueda et al.	
24	5100591		1992-03-31	Cerfontaine et al.	
25	7342019		2008-03-11	Berggren et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

**U.S.PATENT APPLICATION PUBLICATIONS**

Remove

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20050009908		2005-01-13	Hedberg et al.	
	2	20060141043		2006-06-29	Lindfors	
	3	20060198893		2006-09-07	Lindfors	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

4	20050202092		2005-09-15	Skantze et al.	
5	20020188007		2002-12-12	Barth et al.	
6	20030059472		2003-03-27	Brynjelsen et al.	
7	20040039024		2004-02-26	Barth et al.	
8	20070093484		2007-04-26	Cheng	
9	20060134146		2006-06-22	Lindfors	

If you wish to add additional U.S. Published Application citation information please click the Add button. [Add](#)

**FOREIGN PATENT DOCUMENTS**

[Remove](#)

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> j	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1	9635414	WO		1996-11-14	CIBA-Geigy AG		<input type="checkbox"/>
	2	9711686	WO		1997-04-03	Nanosystems LLC		<input type="checkbox"/>
	3	9807414	WO		1998-02-26	Research Triangle Pharmaceuticals Ltd.		<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		10561033
Filing Date		2005-12-16
First Named Inventor	Leifeng Cheng	
Art Unit	1624	
Examiner Name	Zachary C. Tucker	
Attorney Docket Number	133087.09601 101119-1P US	

4	9704756	WO		1997-02-13	Nanosystems LLC		<input type="checkbox"/>
5	9624340	WO		1996-08-15	Nanosystems LLC		<input type="checkbox"/>
6	0033820	WO		2000-06-15	BASF Aktiengesellschaft		<input type="checkbox"/>
7	9713503	WO		1997-04-17	The Penn State Research Foundation		<input type="checkbox"/>
8	9218105	WO		1992-10-29	Sandoz Ltd.		<input type="checkbox"/>
9	0071079	WO		2000-11-30	American Bioscience, Inc.		<input type="checkbox"/>
10	9900113	WO		1999-01-07	Vivorx Pharmaceuticals, Inc.		<input type="checkbox"/>
11	03188438	JP		1991-08-16	Fuji Photo Film Co Ltd.		<input type="checkbox"/>
12	589838	EP		1994-03-30	CIBA-Geigy AG		<input type="checkbox"/>
13	9904766	WO		1999-02-04	Universite Claude Bernard Lyon I		<input type="checkbox"/>
14	9632095	WO		1996-10-17	Astra Aktiebolag		<input type="checkbox"/>

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.W./

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		10561033
Filing Date		2005-12-16
First Named Inventor	Leifeng Cheng	
Art Unit	1624	
Examiner Name	Zachary C. Tucker	
Attorney Docket Number	133087.09601 101119-1P US	

15	9814174	WO		1998-04-09	Vivorx Pharmaceuticals, Inc.		<input type="checkbox"/>
16	9823350	WO		1998-06-04	Zeneca Limited		<input type="checkbox"/>
17	9959709	WO		1999-11-25	Zeneca Limited		<input type="checkbox"/>
18	0038811	WO		2000-07-06	Glaxo Group Limited		<input type="checkbox"/>
19	0044468	WO		2000-08-03	Bristol-Myers Squibb Company		<input type="checkbox"/>
20	0170700	WO		2001-09-27	Solvay Pharmaceuticals B.V.		<input type="checkbox"/>
21	0192293	WO		2001-12-06	Universiteit Leiden		<input type="checkbox"/>
22	0200199	WO		2002-01-03	Glaxo Group Limited		<input type="checkbox"/>
23	03035035	WO		2003-05-01	Glaxo Group Limited		<input type="checkbox"/>
24	03013472	WO		2003-02-20	AstraZeneca AB		<input type="checkbox"/>
25	2736230	DE		1978-02-16	Nippon Soda Co., Ltd.		<input type="checkbox"/>

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.W./

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

26	275607	EP		1988-07-27	Nobel Kemi AB		<input type="checkbox"/>
27	2276567	GB		1994-05-10	United Kingdom Atomic Energy Authority		<input type="checkbox"/>
28	02055059	WO		2002-07-18	Baxter International Inc.		<input type="checkbox"/>
29	0377457	EP		1990-07-11	Fujisawa Pharmaceutical Co., Ltd.		<input type="checkbox"/>
30	0656354	EP		1995-06-07	Sanofi		<input type="checkbox"/>
31	0397859	EP		1990-11-22	Terumo Kabushiki Kaisha		<input type="checkbox"/>
32	458361	CH		1968-06-30	Eprova Ltd.		<input type="checkbox"/>
33	8904308	WO		1989-05-18	Terumo Kabushiki Kaisha		<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

Add

**NON-PATENT LITERATURE DOCUMENTS**

Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1	Final Rejection dated March 26, 2008 cited in Copending Application No. 10/486,211.	<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

2	Non-final Office Action dated July 26, 2007 cited in Copending Application No. 10/486,211.	<input type="checkbox"/>
3	Welin-Berger et al., "Inhibition of Ostwald ripening in local anesthetic emulsions by using hydrophobic excipients in the disperse phase," Int J Pharmaceut (2000) 200(2):249-260.	<input type="checkbox"/>
4	Ostwald, "[Über die vermeintliche Isomerie des roten und gelben Quecksilberoxyds und die Oberflächenspannung gester Körper,]" Phys. Chem (1900) 34:495-503.	<input type="checkbox"/>
5	Higuchi et al., "Physical degradation of emulsions via the molecular diffusion route and the possible prevention thereof," J Pharm Sci (1962) 51:459-466.	<input type="checkbox"/>
6	Kabalnov et al., "Ostwald ripening in two-component disperse phase systems: application to emulsion stability," Colloids and Surface (1987) 24:19-32.	<input type="checkbox"/>
7	Lannibois et al., "Surfactant limited aggregation of hydrophobic molecules in water," Journal Phys II France (1997) 7:319-342.	<input type="checkbox"/>
8	Lowe "Second-generation perfluorocarbon emulsion blood substitutes," Artificial Cell Blood Substitutes and Immob Biotech (2000) 28(1):25-38.	<input type="checkbox"/>
9	Harding "The influence of iodide content on the ripening behavior of a model emulsion system," Photographic Science Engineering (1980) 24(1):32-44.	<input type="checkbox"/>
10	Steffens et al., "O/W Emulsions as Vehicles for Micronized Drug Particles," Eur J Pharm, Biopharm (1991) 37 (4):219-226.	<input type="checkbox"/>
11	Ruch et al., "Preparation of Micrometer Size Budesonide Particles by Precipitation," Journal of Colloid and Interface Science (2000) 229(1):207-211.	<input type="checkbox"/>
12	Malcolmson et al., "Effect of oil on the level of solubilization of testosterone propionate into nonionic oil-in-water microemulsions," J Pharm Sci (1998) 87(1):109-116.	<input type="checkbox"/>

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.W./



**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

13	Sjostrom et al., "The formation of submicron organic particles by precipitation in an emulsion," J Dispersion Science and Tech. (1994) 15(1):89-117.	<input type="checkbox"/>
14	Sjostrom et al., "A method for the preparation of submicron particles of sparingly water-soluble drugs by precipitation in oil-in-water emulsions. II: influence of the emulsifier, the solvent, and the drug substance," J Pharm Sci (1993) 82 (6):584-589.	<input type="checkbox"/>
15	Kasai et al., "Crystal growth of perylene microcrystals in the reprecipitation method," Bull Chem Soc Jpn (1998) 71:2597-2601.	<input type="checkbox"/>
16	Kasai et al., "A novel preparation method of organic microcrystals," Jpn J Appl Phys (1992) 31:L1132-1134.	<input type="checkbox"/>
17	Mohwald et al., "Imaging and other techniques," Current Opinion in Colloid and Interface Science (1997) 2:129-130.	<input type="checkbox"/>
18	Goddard, "Polymer-surfactant interaction Part I. Uncharged water-soluble polymers and charged surfactants," Colloids and Surfaces (1986) 19:255-300.	<input type="checkbox"/>
19	Scalzo et al., Farmaco, Societa Chimica Italiana (1988) 43(9):677-691.	<input type="checkbox"/>
20	Taylor et al., "Pteridines. X New Approach to the Synthesis of Pteridines," Journal of American Chemical Society (1953) 75:1904-1908.	<input type="checkbox"/>
21	Boon et al., "Pteridines. Part V. Derivatives of 1:4-Dihydro-1-and 3:4-Dihydro-3-methyl-6:7-diphenylpteridine," J of Chemical Society (1957) 2159-2161.	<input type="checkbox"/>
22	Al-Dabbagh et al., "Species differences in oxidative drug metabolism: some basic considerations," Archives of toxicology, Supplement Archiv fur Toxikologie. (1984) supplement 7:219-231.	<input type="checkbox"/>
23	Bundgaard, Design of Prodrugs, page 1, copyright 1985, Elsevier Science Publishers.	<input type="checkbox"/>

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.W./

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

24	Silverman, The Organic Chemistry of Drug Design and Drug Action (1992) Academic Press, Inc. pp. 356-400.	<input type="checkbox"/>
25	Saikachi et al., "Synthesis of 2,3-bis (5-nitro-2-furyl) Pyrazine Derivatives," Yakugaku Zasshi (1966) 86(10):927-932 ENGLISH TRANSLATION.	<input type="checkbox"/>
26	Notice of copending applications.	<input type="checkbox"/>
27	Gavezzotti "Are Chrystal Structures Predictable?" Acc Chem Res (1994) 27:309-314.	<input type="checkbox"/>
28	Martin "Frozen Transition States: Pentavalent Carbon et al," Science (1983) 221(4610):509-514.	<input type="checkbox"/>
29	Brittain "X-Ray Powder Diffraction of Pharmaceutical Materials," American Pharmaceutical Review (2002) 5(1)74-80.	<input type="checkbox"/>
30	Di Marzo et al., "Leptin-regulated endocannabinoids are involved in maintaining food intake," Nature (2001) 410:822-825.	<input type="checkbox"/>
31	Howlett et al., "Azido- and isothiocyanato-substituted aryl pyrazoles bind covalently to the CB1 cannabinoid receptor and impair signal transduction," Journal of Neurochemistry (2000) 74(5):2174-2181.	<input type="checkbox"/>
32	Office action dated May 4, 2007 received in copending application no. 10/543,264. (133087.10201)	<input type="checkbox"/>
33	Notice of allowance dated February 8, 2008 received in copending application no. 10/543,264. (133087.10201)	<input type="checkbox"/>
34	Office action dated March 8, 2007 received in copending application no. 10/499,054. (133087.08101)	<input type="checkbox"/>

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.W./

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10561033
Filing Date	2005-12-16
First Named Inventor	Leifeng Cheng
Art Unit	1624
Examiner Name	Zachary C. Tucker
Attorney Docket Number	133087.09601 101119-1P US

35	Notice of allowance dated January 15, 2008 received in copending application no. 10/499,054. (133087.08101)	<input type="checkbox"/>
36	Notice of allowance dated May 1, 2008 received in copending application no. 10/561,060. (133087.09401)	<input type="checkbox"/>
37	Office Action dated January 7, 2008 received in copending application no. 10/561,060. (133087.09401)	<input type="checkbox"/>
38	Notice of allowance dated June 9, 2008 received in copending application no. 10/560,862. (133087.09301)	<input type="checkbox"/>
39	Office Action dated January 31, 2008 received in copending application no. 10/560,862. (133087.09301)	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	/Paul Ward/ (11/20/2008)	Date Considered	
--------------------	--------------------------	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.